Amendments to the Drawings:

Please replace sheets 1-3 of the drawings with attached Replacements Sheets 1-5.

REMARKS/ARGUMENTS

This application has been carefully reviewed in light of the Office Action dated January 9, 2008. By way of this amendment, new claims 8-11 have been added, and claims 1-7 have been canceled. Sheets 1-3 of the drawings have been replaced with Replacement Sheets 1-5. The specification has been amended to include missing Table 1 and Table 2 as provided on Incorporated Sheets 1-5.

All Incorporated Sheets claim incorporation to PCT/JP03/08305 and WO 2004/003021 as required by MPEP § 1.57, and an English translated copy of the priority document is provided as United States Patent Publication No. 2006/0292160. Replacement Sheets 2 and 4 also claim incorporation to PCT/JP03/08305 and WO 2004/003021 as required by MPEP § 1.57, and an English translated copy of the priority document is provided as United States Patent Publication No. 2006/0292160.

Failure to comply with 37 C.F.R. § 1.821-1.825

The specification was objected to under the provisions set forth by 37 C.F.R. § 1.821-1.825 for failing to identify sequences in the specification and/or drawings with a sequence identifier. Replacement Sheets 1-5 and Incorporated Sheets 1-5 have been added to further identify the sequence listings.

Objections to the Specification

The specification was objected to because Tables 1 and 2 were listed but not provided. Incorporated Sheets 1-5 are provided to address this objection and show missing

Table 1 and Table 2.

The disclosure referenced five figures, while only three appeared in the application. Replacement Sheets 2 and 4 are provided to amend the drawings to include the missing figures. The inadvertently omitted portion of the drawings can be found on sheets 3 and sheet 5 of the translated application, United States Patent Publication No. 2006/0292160.

The drawings were also objected to for failing to include a figure designation. Replacement Sheets 1, 3, and 5 are provided in response to the Examiner's rejection that the figures did not include a figure designation.

Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 1-7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-6 have been cancelled in light of this rejection.

Rejections under 35 U.S.C. § 112, First Paragraph

Claims 4-7 are rejected under 35 U.S.C. § 112, first paragraph for failing to provide an enabling disclosure for the claimed invention. Claims 1, 4, and 5 are rejected for containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the Inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 2-5 are rejected because the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1-7 have been cancelled in light of this rejection.

The present invention is directed to a monoclonal antibody falling within the category of human IgM which specifically recognizes HIV-infected cells and induces apoptosis. Using the obtained antibody, it is intended to provide a remedy for patients suffering from HIV-infection, which contains as the active ingredient a human IgM antibody capable of specifically reacting with HIV-infected cells, inducing apoptosis in the infected cells and thus disrupting the cells.

In response to the Examiner's rejections, new claims 8-11 are presented. Claim 8 provides a human IgM monoclonal antibody specifically recognizing HIV-infected cells and including apoptosis of the infected cells, said antibody denominated 2G9 antibody obtainable by a cell strain with an accession No.FERM BP-8378, and comprising sequence a H-chain variable region encoded by the base sequence SEQ ID No.1 and a L-chain variable region encoded by the base sequence SEQ ID No.2. Support for the newly added claims can be found in at least Fig. 1, which shows that the HIV-infected cells are recognized, Fig. 3, which shows that apoptosis is introduced into the HIV-infected cells, the accession number as indicated in the paragraph beginning on page 6, line 3, and SEQ ID Nos. 1 and 2 as indicated in the sequence listing filed with the USPTO on September 14, 2005.

The cell has also been deposited in the International Patent Organism Depository (IPOD) in Japan and is available through accession No. FERM BP-8378. The IPOD complies with the terms of the Budapest treaty, and all restrictions imposed by the

depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of a patent.

The Director is hereby authorized to charge any additional fees or any underpayments which may be required for the above-referenced application to Deposit Account No. 01-0265.

Respectfully submitted,

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File No.: 3348/1

TABLE 1

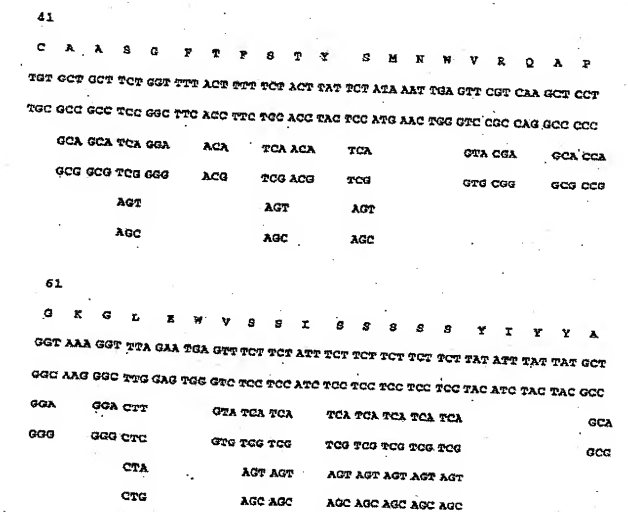
Base Sequence of μ-Chain Variable Region

TGCCCTGGATTCCAAGGCCTATCCACTTGGTGATCAGCACTGAGCACCGAGG
ATTCACCATGGAACTGGGGCTCCGCTGGGTTTTCCTTGTTGCTATTTTAGAA
GGTGTCCAGTGTGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCCTGGTCAAG
CCTGGGGGGTCCCTGAGACTCTCCTGTGCAGCCTCTGGATTCACCTTCAGTA
CTTATAGCATGAACTGGGTCCGCCAGGCTCCAGGGAAGGGGCTGGAGTGGG
TCTCATCCATTAGTAGTAGTAGTTACATATACTACGCAGACTCAGTGAA
GGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCACTGTATCTGCAA
ATGAACAGCCTGAGAGCCGAGGACACGGCTGTGTATTACTGTGCGAGAGAT
CTCCTTATAGCAGTGGCTGGCCACTGGGGCCAGGGAACCCTGGTCACCGTCT
CCTCA

Base Sequence of κ-Chain Variable Region

CTCAGTCAGGACACAGCATGGACATGAGGGTCCCTGCTCAGCTCCTGGGACT
CCTGCTGCTCTGGCTCCCAGATACCAGATGTGACATCCAGATGACCCAGTCT
CCATCCTCCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACTTGCCGGG
CGAGTCAGGGCATTAGCAATTATTTAGCCTGGTATCAGCAGAAACCAGGGAA
AGTTCCTAAACTCCTGATCTATGCTGCATCCACTTTGCAATCAGGGGTCCCA
TCTCGGTTCAGCGGCAGTGGATCTGGGACAGATTTCACTCTCACCATCAGCA
GCCTGCAGCCTGAAGATGTTGCAACTTATTACTGTCAAAAGTATAACAGTGC
CCCGTACACTTTTGGCCAGGGGACCAAGCTGGAGATCAAA

TABLE 2: Examples of cDNA encoding equivalent amino acids in the amino acid sequences of 2G9 antibody



Incorporated Sheet
3/5

81

D S V E G R F T I S R D N A K N S L Y L

GAT TCT GTT AAA GGT CGT TTT ACT ATT TCT CGT GAT AAT GCT AAA AAT TCT TTA TAT TTA

GAG TCC GTC AAG GGC CGC TTC ACC ATC TCC CGC GAC AAC GCC AAG AAC TCC TTG TAC TTG

TCA CTA AGA CGA ACA TCA CGA GCA TCA CTT CTT

TCG CTG AGG CGG ACG TCG CGG GCG TCG CTC CTC

AGT AGT AGT CTA CTA

AGC AGC AGC CTG CTG

Incorporated Sheet
4/5

101

Q M S S L R A S D T A V Y Y C A R D L L

CAA ATA AAT TCT TTA CGT GCT GAA GAT ACT GCT GTT TAT TAT TGT GCT CGT GAT TTA TTA

CAG ATG AAC TCC TTG CGC GCC GAG GAC ACG GCG GTC TAC TAC TGC GCC CGC GAC TTG TTG

TCA CTT CGA GCA ACA GCA GTA GCA CGA CTT CTT

TCG CTC CGG GCG ACG GCG GTG GCG CGG CTC CTC

AGT CTA CTA CTA

AGC CTG CTG CTG

121

I A V A G H W G Q G T L V T V S S

ATT GCT GTT GCT GGT CAT TGA GGT CAA GGT ACT TTA GTT ACT GTT TCT TCT

ATC GCC GTC GCG GGC CAC TGG GGC CAG GGC ACC TTG GTC ACC GTC TCC TCC

GCA GTA GCA GGA GGA GGA ACA CTT GTA ACA GTA TCA TCA

GCG GTG GCG GGG GGG GGG ACG CTC GTG ACG GTG TCG TCG

CTA AGT AGT

CTG AGC AGC

Incorporated Sheet
5/5